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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,779	07/27/2001	Ronald J. Skrzyniarz	1945.BDM	8792
7590	02/28/2006			
Cynthia L. Foulke NATIONAL STARCH AND CHEMICAL COMPANY 10 Finderne Avenue Bridgewater, NJ 08807-0500			EXAMINER CHANG, VICTOR S	
			ART UNIT 1771	PAPER NUMBER

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/916,779

Applicant(s)

SKRZYNIARZ ET AL.

Examiner

Victor S. Chang

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-18,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-18,21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Introduction***

1. In view of the Appeal Brief filed on 12/20/2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Applicant's arguments with respect to the rejection in section 6 of Office action mailed 1/21/2005 have been fully considered. Upon further reconsideration, it is noted that the product-by-process limitation of using a foamed adhesive has not been shown to produce a patentably distinct article, as such the prior rejections based on Murphy et

al. (US 4036673) have been withdrawn. Nevertheless, an additional search is required, and it yielded a new reference. The new reference is found to anticipate and/or render obvious the instant claimed invention. Applicant's comments regarding the prior art are moot in view of the new grounds of rejection.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 12-14 and 21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Karszes (US 3891788).

Karszes' invention relates to adhesives for forming laminates (column 1, lines 4-12), and teaches that it is known art that white glue (emulsion adhesive) polyvinyl acetate is a suitable adhesive for bonding high pressure laminates to a substrate such as plywood, particle board, chipboard, etc., to make countertop, flooring, etc. (US 3891788, column 2, lines 15-27).

For claim 12, regarding the product-by-process limitation "... bonded to ... using a foamed adhesive ...", the Examiner notes that since the method limitation has not been shown on the record to produce a patentably distinct article, the formed articles are rendered *prima facie* obvious. It should be noted that product-by-process claims are product claims and that to be limiting in a product claim, a process limitation must

be evidenced as effecting the structure or chemistry of the resultant product over the prior art. Further, the burden of proof for this showing is on Applicant after the Examiner presents an otherwise *prima facie* rejection. See MPEP § 2113.

Similarly, for claim 13, regarding the product-by-process limitation "... is foamed from about 20 to about 60% by volume ...", the Examiner notes that since the method limitation has not been shown on the record to produce a patentably distinct article, the formed articles are rendered *prima facie* obvious.

For claim 14, Karszes expressly teaches that polyvinyl acetate is a suitable adhesive, as set forth above, which read on the recited limitation "a blend of at least two polyvinyl acetates" as claimed, such as a blend of two or more molecules of polyvinyl acetates. In particular, the Examiner contends that in the absence of any property difference between the "two polyvinyl acetates", the recited limitation does not preclude a single polyvinyl homopolymer to read on the instant invention as claimed.

For claim 21, with respect to the product-by-process limitations of preparing polyvinyl acetate by "batch polymerization" and "continuous polymerization", the Examiner again notes that the polymerization processes have not been shown to produce materially different polyvinyl acetates, as such the formed articles are rendered *prima facie* obvious.

6. Claims 12-17, 21 and 22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mafoti et al. (US 5804618).

Mafoti's invention relates to polyvinyl acetate emulsion based adhesives for bonding melamine formaldehyde resin treated decorative solid color and print paper to particle board. This polyvinyl acetate emulsion based adhesive is formulated with tackified polyvinyl alcohol, starch, a tackifier and a coupling agent. Wrinkling and edge and corner peel resulting during the movement of sheets of melamine resin treated paper on the top and bottom surfaces of sheets of particle board through a heating and pressing zone is substantially eliminated (abstract). Mafoti also expressly teaches that the melamine formaldehyde resin treated decorative solid color and print paper is a high pressure decorative laminate of melamine formaldehyde impregnated paper, and it can be adhesively bonded to substrate such as particle board (column 1, line 66 to column 2, line 12).

For claim 12, regarding the product-by-process limitation "... bonded to ... using a foamed adhesive ...", the Examiner repeats that since the method limitation has not been shown on the record to produce a patentably distinct article, the formed articles are rendered *prima facie* obvious. It should be noted that product-by-process claims are product claims and that to be limiting in a product claim, a process limitation must be evidenced as effecting the structure or chemistry of the resultant product over the prior art. Further, the burden of proof for this showing is on Applicant after the Examiner presents an otherwise *prima facie* rejection. See MPEP § 2113.

Similarly, for claim 13, regarding the product-by-process limitation "... is foamed from about 20 to about 60% by volume ...", the Examiner repeats that since the method

limitation has not been shown on the record to produce a patentably distinct article, the formed articles are rendered *prima facie* obvious.

For claim 14, Mafoti expressly teaches that polyvinyl acetate is a suitable adhesive, as set forth above, which read on the recited limitation "a blend of at least two polyvinyl acetates" as claimed, such as a blend of two or more molecules of polyvinyl acetates. In particular, the Examiner contends that in the absence of any property difference between the "two polyvinyl acetates", the recited limitation does not preclude a single polyvinyl homopolymer to read on the instant invention as claimed.

For claims 15 and 16, Mafoti teaches the inclusion of a starch filler in polyvinyl acetate emulsion adhesive, as set forth above.

For claim 17, Mafoti teaches the inclusion of a defoamer in the polyvinyl acetate emulsion based adhesive formulation (column 5, line 5).

For claim 21, with respect to the product-by-process limitations of preparing polyvinyl acetate by "batch polymerization" and "continuous polymerization", the Examiner again repeats that the polymerization processes have not been shown to produce materially different polyvinyl acetates, as such the formed articles are rendered *prima facie* obvious.

For claim 22, Mafoti expressly teaches that the suitable amounts of vinyl acetate homopolymer emulsion and starch are in the ranges of 69-88 and 5-24 wt%, respectively (column 8, lines 50-57).

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karszes (US 3891788) in view of Mafoti et al. (US 5804618).

The teachings of Karszes and Mafoti and Murphy are again relied upon as set forth above.

For claim 18, in the absence of unexpected results it would have been obvious to one of ordinary skill in the art to modify and formulate the polyvinyl acetate adhesive taught by Karszes with starch, as taught by Mafoti to make a countertop, motivated by the desire to obtain an improved countertop by eliminating wrinkling, and peeling at edge and corner.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In addition, the following references are cited of interest for installing high pressure laminate to wood particleboard with white glue polyvinyl acetate emulsion for flooring, shelving and kitchen countertop as analogous products:

"Wood Particleboard and Flakeboard", United States Department of Agriculture, Forest Products Laboratory, General Technical Report, FPL-GTR-53, 1986.

"Formica® Brand Laminate", Formica Corporation, 1997.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Victor S Chang  
Examiner  
Art Unit 1771

1/26/2006

  
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